SECOND PROGRESS REPORT
ON THE
TRADING OF WATER POLLUTION CREDITS

Prepared by:
Wisconsin Department of Natural Resources
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This Report is submitted to the Governor, the Secretary of Administration and the Land and Water Conservation Board according to the provisions of s. 283.84(5), Stats.

Executive Summary

This second annual report to the Governor, the Secretary of Administration and the Land and Water Conservation Board on the trading of water pollution credits describes the progress and status of the pilot projects in coordinating state and local efforts to improve water quality through trading. Section 283.84, Stats., enacted in 1997, required the Department of Natural Resources to "administer at least one pilot project to evaluate the trading of water pollution credits". Under this law, a permitted source of water pollution can discharge pollutants at levels above what would otherwise be authorized in the WPDES discharge permit, while another entity removes additional pollutants. This is allowed provided certain agreements are reached with the another discharger, the Department or other units of government.

Department staff continues to meet with a variety of stakeholders to address the issues associated with watershed-based trading. Progress, primarily through the work within the pilot projects, continues on encouraging local participation, developing a framework for the trading process, identifying and addressing the many legal, administrative and technical issues, evaluating the costs and associated phosphorus loading reductions of best management practices, and distributing available funding. The Department is tracking activities and progress on pollutant trading in other parts of the country, and participates in the Great Lakes Trading Network. Currently, the program has three pilot project areas exploring watershed-based trading. They are: Red Cedar River Basin, Fox-Wolf Basin, and Rock River Basin.

The **Red Cedar River Watershed** is in west central Wisconsin in the Lower Chippewa River Basin. Northern parts of the basin are predominantly forested and agriculture is a dominant land use in the rest of the basin. There has been, and continues to be, extensive monitoring within the Red Cedar Watershed to evaluate water quality, to identify the causative factors and to gather public perception on goals to be set. However, additional monitoring is needed to collect information on all the impoundments and lakes in the watershed. Without this information on how to improve water conditions throughout the watershed, partnership and source cooperation is unlikely. The City of Cumberland has made the most progress toward implementation of a trade to offset their phosphorus discharge. They are seeking to implement a phosphorus trade on any lands that drain to the Hay River above the Prairie Farm flowage. Together with the Barron County LCD, they believe an appropriate amount of nonpoint source reductions can be achieved in trade for not implementing phosphorus removal at the wastewater treatment plant. Other facilities are in the process of evaluating trading to meet phosphorus limits, including the City of Colfax, the City of Turtle Lake and the Turkey Store wastewater treatment facility.

The **Rock River Basin** is located in south central Wisconsin. Nutrient trading has been actively discussed in this area since about 1996, and current efforts are centered on phosphorous management. A workplan has been developed containing several specific elements. Modeling will determine which parts of the basin are the largest sources of phosphorus and monitoring will allow calibration of the model and an evaluation of changes in water quality. In addition, an element of the work plan will permit development of a standardized framework under which trading can occur with a minimum of overhead costs, including a comprehensive evaluation of legal, organizational and economic issues. The Rock River pilot has researched the effectiveness and cost of nonpoint best management practices and evaluated the biological impact of

phosphorus in the system.

The **Fox-Wolf Drainage Basin** covers a large area in the northeast part of the state. The watershed based trading team, headed by the Fox-Wolf 2000 organization, has completed a number of actions over the last year, implemented others and made plans for additional activities to be completed over the coming months. To support the pollutant trading activities, Fox-Wolf 2000 has solicited grants from a number of sources to: 1) research the economic and legal basis for pollutant trading; 2) communicate and inform the public about trading; 3) participate on advisory groups addressing trading; 4) participate in the nonpoint source program redesign and 5) conduct modeling for three sub-basins in the Fox-Wolf Basin. Upcoming activities include plans to hold a series of meetings during the fall of 1999 in each of the three main sub-basins of the Fox-Wolf, with all stakeholders, to inform and educate the participants about the concept of pollutant trading and determine if interest exists in this area. A final report to the agencies that are providing grant funds is due in April 2000. By then, the actions planned to date will be completed and a better idea will exist about the interest and possibility for pollutant trading in the Fox-Wolf Basin.

Although the Department is counting on the pilots to provide the majority of the answers to questions regarding implementation of pollutant trading, staff have also consulted with the Watershed Advisory Committee and contracted for other research studies to provide the technical background. The research investigations have evaluated how best management practices may reduce phosphorus discharges from nonpoint sources and shown that levels of phosphorus impact the riverine surface waters differently depending on the size and characteristics of the stream.

The Department has continued to make progress in evaluating the potential for watershed-based trading. Over the last year, the three pilots have taken different approaches to determining the appropriateness of watershed-based trading in their area. The Department and the stakeholder groups (pilots) have identified and discussed a large number of issues. This year has seen the completion of additional monitoring and modeling work, the resolution of a number of administrative and institutional issues and potentially the first trade of pollutant credits. The expectation for next year includes the completion of trades in the Red Cedar River Basin, finalizing a framework for trading in the Rock River Basin and the identification of the level of interest and the possibility for trading in the Fox-Wolf Basin.